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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,366	12/01/2004	Yasuhiro Adachi	L9289.04186	1431
24257	7590	08/01/2006	EXAMINER	
STEVENS DAVIS MILLER & MOSHER, LLP 1615 L STREET, NW SUITE 850 WASHINGTON, DC 20036			HU, RUI MENG	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/516,366

Applicant(s)

ADACHI, YASUHIRO

Examiner

RuiMeng Hu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/01/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/07/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 03/07/2005 has been considered by the examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-2 and 4-5** are rejected under 35 U.S.C. 102(e) as being anticipated by **Tait (U.S. Patent # 6697610)**.

Consider **claim 1**, Tait clearly discloses an automatic gain control apparatus comprising: a variable gain amplifier (variable gain amplifier 26) that amplifies a received signal with set gain (adjusted gain); a current position acquiring section (global position sensor) that acquires current position of its own station (the RF receiver 10) at a start of communication (column 2 lines 37-38); an estimation section (the microprocessor 32) that calculates a communication distance from a communication partner station (the corresponding transmitter) based on said acquired current position of its own station (the location of the receiver 10 as supplied by the global position

sensor 34) and estimates a receive level of the received signal (determine the received power) at the start of communication based on said calculated communication distance (calculated distance); and an initial value setting section (the microprocessor 32) that sets an initial value for said gain based on the estimated receive level of said received signal (the microprocessor 32 calculates the received signal strength and adjusts the gain of the variable gain amplifier 26) (column 3 lines 12-33, figure 1).

Consider **claim 2** and **as applied to claim 1** above, Tait clearly discloses a storing section (memory) that stores position information (location) of said communication partner station (the corresponding transmitter), wherein said estimation section (the microprocessor 32) calculates said communication distance from said communication partner station (the corresponding transmitter) based on said acquired current position of its own station (the location of the receiver 10 as supplied by the global position sensor 34) and the stored position information of said communication partner station (the stored location of this transmitter) (column 3 lines 12-33, figure 1).

Consider **claim 4** and **as applied to claim 1** above, Tait clearly discloses a radio communication apparatus comprising the automatic gain control apparatus (column 3 lines 12-33, figure 1).

Consider **claim 5**, Tait clearly discloses an automatic gain control method comprising the steps of: amplifying a received signal (variable gain amplifier 26) with set gain (adjusted gain); acquiring current position of its own station at a start of communication (the location of the receiver 10 as supplied by the global position sensor 34); calculating a communication distance from a communication partner station (the

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corresponding transmitter) based on said acquired current position of its own station; estimating a receive level of the received signal at the start of communication based on said calculated communication distance (determine the received power based upon the calculated distance); and setting an initial value for said gain based on the estimated receive level of said received signal (the microprocessor 32 calculates the received signal strength and adjusts the gain of the variable gain amplifier 26) (column 3 lines 12-33, figure 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tait (U.S. Patent # 6697610) in view of Stoter et al. (U.S. Patent Application Publication # 2003/0026363).**

Consider **claim 3** and **as applied to claim 1** above, Tait fails to disclose a detection section that detects a power level of said received signal amplified with said gain by said variable gain amplifier; and a control section that controls setting of said gain of said variable gain amplifier after the start of communication based on said detected power level.

In the same field of endeavor, Stoter et al. clearly disclose an automatic gain control apparatus comprising a detection section that detects a power level of the received signal amplified with a gain by a variable gain amplifier 16; and a control section (AGC loop controller 22) that controls setting of the gain of the variable gain amplifier 16 after the start of communication based on the detected power level (paragraph 0036, figure 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Stoter et al. into the automatic gain control apparatus of Tait as continuously controlling the gain of the power level of received signal after the start of communication for stabilizing the power level of received signal and linearization in processing during the entire communication.

Conclusion

6. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RuiMeng Hu
R.H./rh
July 12, 2006

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

Edan Orgad 7/18/06